



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

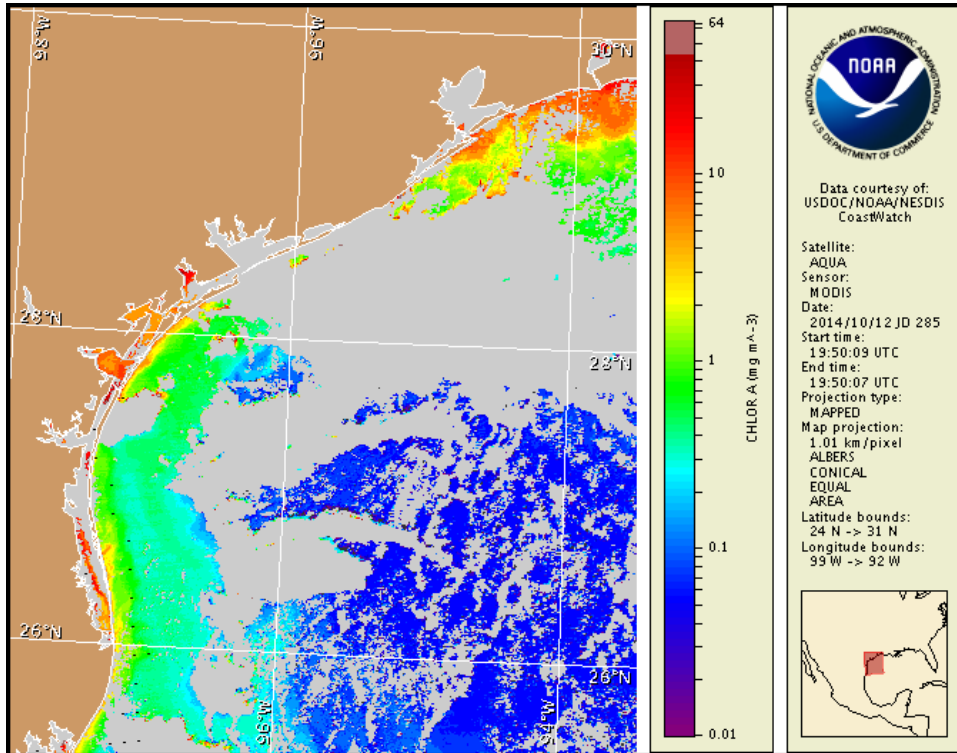
Tuesday, 14 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 9, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 5 to 9: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

*Karenia brevis* (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Tuesday, October 14 through Monday, October 20.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

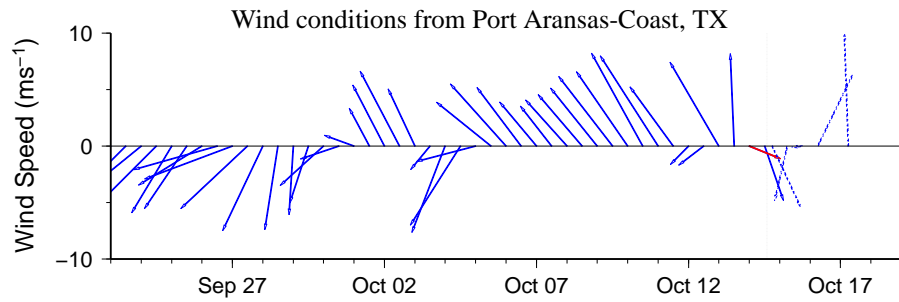
## Analysis

Sampling from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, continues to indicate that *Karenia brevis* concentrations range from 'not present' to 'very low a' (TAMU; 10/9-14). No samples of *K. brevis* have been reported from along the Texas coast. No respiratory irritation or fish kills have been reported from alongshore the Texas coast over the past few days (TPWD; 10/9-13). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (10/12, shown left) is partially obscured by clouds along- and offshore portions of the Texas coastline from Galveston Island to Aransas Pass, and from Mustang Island to northern Padre Island, limiting analysis in these regions. Elevated to high chlorophyll (2-16  $\mu\text{g/L}$ ) is visible stretching along- and offshore from Sabine Pass to Galveston Island. Patches of elevated chlorophyll (2-7  $\mu\text{g/L}$ ) are also visible along- and offshore from Port Aransas to Mustang Island and along portions of the Padre Island National Seashore region and South Padre Island. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and the patches from along- and offshore the Sabine Pass to Matagorda Island region are most likely due to the resuspension of benthic chlorophyll and sediments along the coast. *In situ* sampling is necessary to confirm the presence of *K. brevis*.

Forecast models based on predicted near-surface currents indicate that the maximum transport of *K. brevis* cell concentrations from coastal sample locations may be 40km north from the from the Port Aransas region from October 12-17.

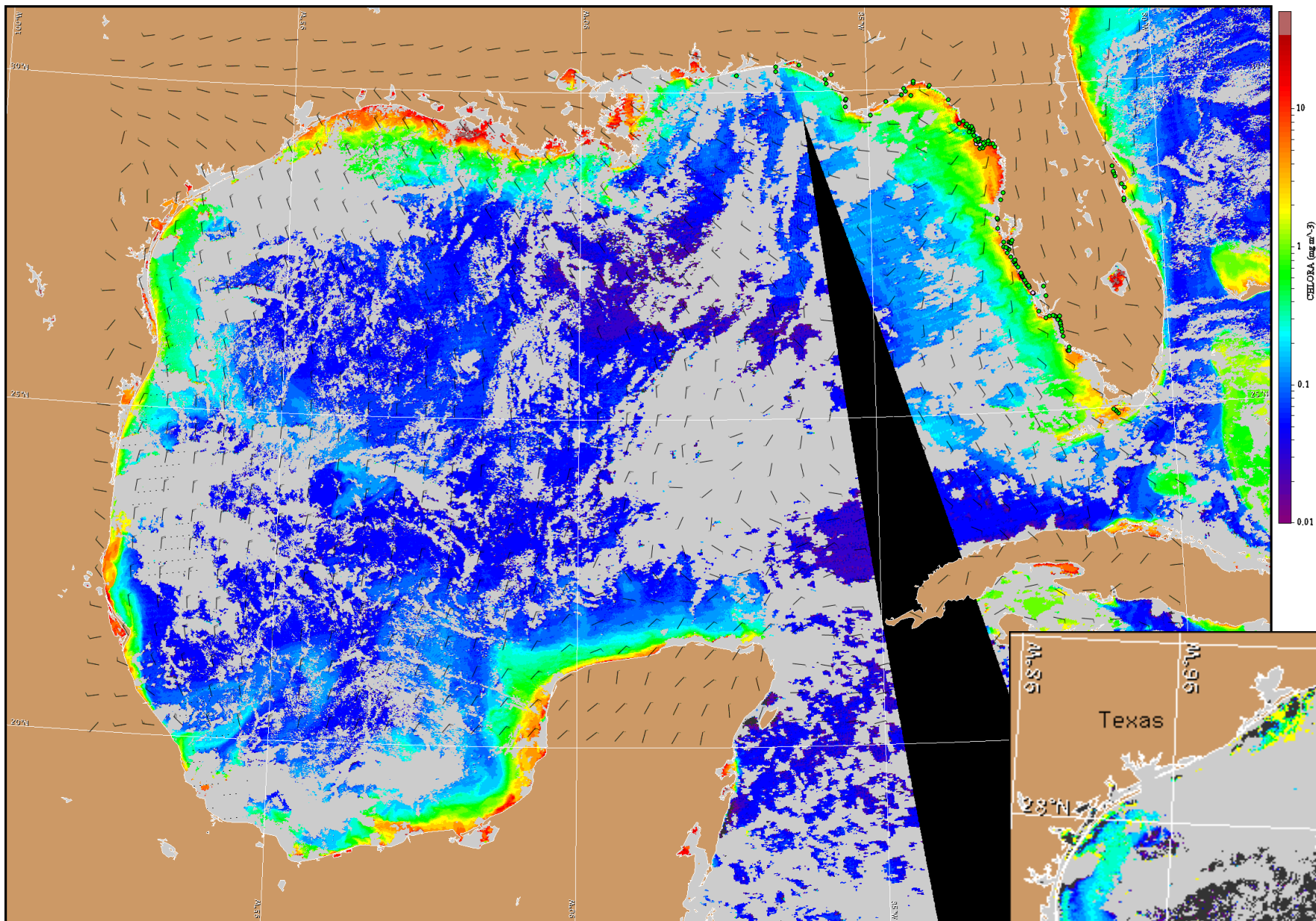
Derner, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

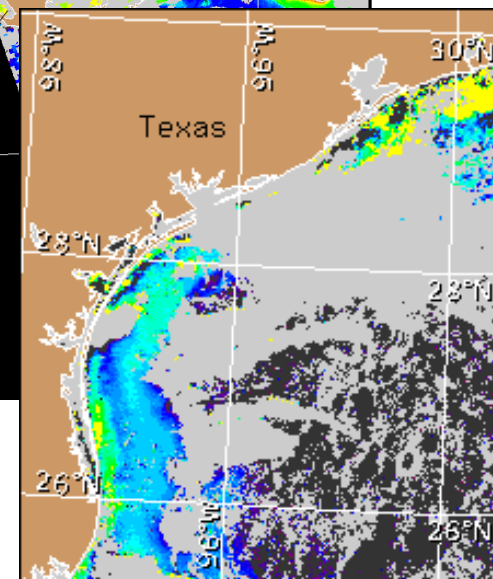
## Wind Analysis

**Port Aransas:** Northwest winds (10-20kn, 5-10m/s) today becoming north (5-15kn, 3-8m/s) tonight into Wednesday. Southeast winds (5-10kn, 3-5m/s) Wednesday afternoon. South winds (5-15kn) Wednesday night through Friday. Southeast winds (5-15kn) Saturday.



Satellite chlorophyll image and forecast winds for October 15, 2014 06Z with points representing cell concentration sampling data from October 5 to 9: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).